

POTENTIAL IMPACT OF YEAR ROUND EDUCATION ON
OHIO AGRICULTURAL EDUCATION PROGRAMS

A Thesis

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By

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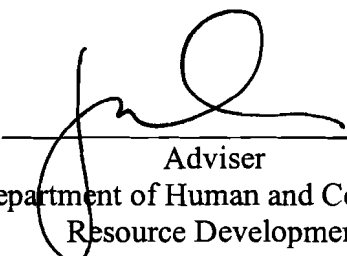
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ABSTRACT

The primary objective of this study was to assess the potential impact of year-round education (YRE) reform upon agricultural education programs and their communities. A meta-analysis of research completed by four Ohio school districts was conducted. Two of the school districts selected for the study had existing YRE programs and two had extensively researched the option of implementing YRE programs within their respective districts. During the analysis, data was collected regarding the definition of YRE, descriptions of YRE schools, variables leading to the development of YRE programs, and the effects of YRE upon students, schools, and communities. From the data, theoretical effects were extrapolated regarding the potential impact of YRE on agricultural education programs and their communities.

The findings of this study indicated that YRE has the potential to impact agricultural education programs in both positive and negative manners. With regard to students, 75 percent of the schools surveyed reported that YRE increased student achievement and learning retention. Similar improvements were projected to occur in YRE agricultural education programs, but to a smaller degree, since the existing structure of agricultural education programs includes year-round learning. The surveyed districts also cited a decrease in opportunities for students to participate in traditional summer activities (i.e., Bible schools, camps, and athletic leagues.) As a result, agricultural

education students were expected to have fewer opportunities to participate in agricultural or FFA-related camps, conferences, and fairs.

With regard to the effects of YRE upon schools, three out of four of the districts reported that initially, YRE led to increased costs. Although cost increases varied between districts, schools with agricultural education programs have been expected to experience cost increases as well. For agricultural education programs, increases in district expenses have led to budget cuts and/or the complete elimination of such programs.

From a parent's perspective, YRE led to increased difficulty in securing childcare due to the untraditional vacation times in YRE. All of the districts surveyed indicated that securing child became problematic. Since agricultural education programs have traditionally been found in high schools and select middle schools, providing childcare has not been an issue. However, youth enrolled in agricultural education programs have been asked to be childcare providers, especially when parents have few alternatives. The study projected the issue of childcare could lead to decreased participation in FFA activities due to the increase in high school-age youth serving as childcare providers.

Dedicated to my loving parents, Jim and Bonnie, for their endless support and guidance,
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TABLE OF CONTENTS

	<u>Page</u>
Dedication.....	iii
Acknowledgements.....	iv
Chapters:	
1. Introduction.....	1
1.1 Overview.....	1
1.2 Problem Identification and Justification.....	3
1.3 Purpose and Objectives.....	5
1.4 Limitations.....	6
1.5 Significance of the Problem.....	7
2 Literature Review.....	9
2.1 Research Related to Objective 1.....	9
2.2 Research Related to Objective 2.....	11
2.3 Research Related to Objective 3.....	12
3 Methodology.....	15
3.1 Research Design.....	15
3.2 Population and Sample.....	15
3.3 Data Collection.....	16
3.4 Data Analysis.....	19
4 Results.....	21
4.1 Objective 1.....	21
4.2 Objective 2.....	24
4.3 Objective 3A.....	26
4.4 Objective 3B.....	29
4.5 Objective 3C.....	33

5	Discussion.....	36
5.1	Conclusions.....	36
5.2	Recommendations.....	49
5.3	Future Investigations.....	50
	References.....	51
	Appendices.....	52
	APPENDIX A: Letter of Request	54
	APPENDIX B: Summary of Characteristics of YRE.....	55
	APPENDIX C: Summary of Variables Leading to the Development of YRE.....	56
	APPENDIX D: Summary of Effects of YRE Upon Students.....	57
	APPENDIX E: Summary of Effects of YRE Upon Schools.....	59
	APPENDIX F: Summary of Effects of YRE Upon Communities.....	62
	APPENDIX G: Summary of Effects of YRE Upon Students and the Probable Corresponding Effects of YRE Upon Agricultural Education Programs.....	64
	APPENDIX H: Summary of Effects of YRE Upon Schools and the Probable Corresponding Effects of YRE Upon Agricultural Education Programs.....	66
	APPENDIX I: Summary of Effects of YRE Upon Communities and the Probable Corresponding Effects of YRE Upon Agricultural Education Programs.....	68

CHAPTER 1

INTRODUCTION

1.1 Overview

Although in the early years, year-round education (YRE) was considered rare and highly experimental, YRE has taken on a new vibrancy as America nears the dawn of the new millennium. YRE reform is a rearrangement of the school year, spreading the learning process over a period of 12 months instead of the traditional nine months (Kneese, 1996). Within YRE, there is a variety of structures.

The two major structures in YRE are the school calendar structure and the tracking structure. Under the calendar structure, attention is focused on the scheduling of school versus vacation days, and increasing the number of days students spend in school from 180 days to between 220 to 240 days (Opheim, 1995, On-line). For example, in a 45:15 plan, students attend classes for nine weeks (45 days) and have three weeks (15 days) vacation. During the vacation, intersessions are offered in which students can attend short classes often focusing on intervention.

In the track structure, students may or may not attend class at the same time. In a single-track structure, all students follow the same school calendar and attend classes at the same time. A multiple track structure offers more flexibility as students are divided

into different attendance groups, each of which attend school on a slightly different schedule (Greenfield, 1994).

Within each major structure, school leaders have numerous choices concerning the specific schedule to follow. A few of the most common plans are 45:15 (nine weeks in class, three weeks on vacation), 60:20 (12 weeks in school, four weeks vacation), 90:30 (18 weeks in school and six weeks vacation), trimester system consisting of three 16-week sessions, and quarter system consisting of four 12-week sessions (Greenfield, 1994).

Although the structuring aspect of YRE may seem trivial, structuring has been found to directly correlate with specific implementation reasons. Single-track YRE, which involves all students following the same school calendar and time schedule, is usually implemented for reform reasons as some research supports the claim that YRE enhances student achievement by providing a schedule that minimizes learning loss. Multiple-track YRE, which divides the student body into different attendance groups, has generally been implemented in order to increase the capacity of the school and/or reduce class sizes (Kneese, 1996). In particular, school districts look to the multi-track option as a way of saving costs of building new schools. One school in Texas saved over \$30 million taxpayer dollars, over the past five years, by implementing a multi-track program (Barber, 1996, On-line).

Numerous studies have been conducted concerning the effects and impact of YRE on a variety of areas. Researchers have looked at the effects upon staff, administration, student achievement, parents, communities, and costs. Although disputes over whether the effects are positive or negative exist in all areas, it is the area of student achievement

that is the most controversial (Opheim, 1995, On-line). Studies conducted by Guthrie (1985), Brekke (1986), Moss (1989), and Bradford (1992) all revealed that year-round education enhanced student achievement, while other researchers, including Johnson (1984), Kuner-Roth (1985), Alkin (1987), and Costa (1987) found no significant impact (Kneese, 1996).

In addition to inconclusive results, many studies have been criticized for poor research design. Specifically, YRE research has been accused of failing to isolate the effect(s) of YRE from other variables such as population demographics or length of study. Other research has been criticized for its failure to evaluate single-track and multi-track programs separately. According to a study by Quinlan et al. (1997), students in single-track programs reached an expected level of achievement, whereas multi-track students fell below such expectations. Therefore, when the opposing results from single-track and multi-track programs are combined, the resulting degree of student achievement is not completely representative of either the single-track or multi-track programs. In addition, long-term YRE studies have been virtually nonexistent. In a 1983 study, Merino concluded that a need for long-term YRE studies existed because the benefits of YRE were not apparent for four years. Merino contested that since the benefits of YRE were not apparent for four years, the actual effects of YRE on student academic achievement were yet to be determined (Kneese, 1996).

1.2 Problem Identification and Justification

Agricultural education is an intracurricular activity offered in approximately 350 schools in Ohio. Although, currently, only five Ohio school districts are enrolled in YRE

programs, the number is expected to increase. Of those current, year-round schools, none offer agricultural education programs. However, as the number of year-round schools increase, so will the likelihood that a school with an agricultural education program will make the transition to YRE.

Currently, little research has been conducted on the effects of YRE on curricular activities as a whole. Studies completed on agricultural education programs seem to be nonexistent. Therefore, no data exists regarding the effects of YRE reform upon agricultural education programs. Related to agricultural education, will the shift to YRE enhance student achievement, increase total student participation in the Future Farmers of America (FFA) activities, or strengthen supervised agricultural experience (SAE) projects?

Since 1917, agricultural education has been composed of three components: classroom instruction, SAE programs, and the FFA. In traditional agricultural education programs, classroom instruction transcends a period of nine months, stopping in the summer. Learning, however, does not stop. Students continue to learn during their summer vacation by working with their SAE projects and participating in numerous FFA activities including camps, contests, and county/state fairs. For this reason, agricultural education students, in theory, have the opportunity to interact with their agriculture teachers all year, thus never reaching a stopping point in their learning. Therefore, it would be conceivable that agricultural education is, more or less, year-round education. However, the implementation of today's view on YRE has the potential to significantly alter the traditional educational structure of agricultural education.

The impact of YRE on supervised agricultural experience projects is a major question. Traditionally, summertime offered the opportunity for students to focus a large portion of their energy on their SAE projects. How will attending classes during the same period of time affect the quality of such hands-on-learning activities?

A large portion of agricultural programs are located in rural areas. Although the number of students from family farms is declining, many agricultural education students come from farm backgrounds and are needed to work at home from time to time. Several non-farm students are connected to agriculture as well through employment. After considering these facts, the question arises regarding the effects of YRE upon rural communities, school attendance, and community support for the school.

The effects of YRE upon student achievement is also an area of question. The inconclusiveness of past studies brings question to whether year-round classroom instruction would enhance student competency levels as defined in the Ohio Competency Analysis Profiles (OCAPs). Given the above information, it is clear that the impact of YRE on agricultural education is unknown.

1.3 Purpose and Objectives

Given the preceding discussion, the purpose of this study was to assess the potential impact of year-round education upon agricultural education programs and their communities. In order to accomplish the purpose, three specific objectives must be met. The first objective involves describing year-round schools. Descriptions should include track options and calendar models as well as a clarification of the terms year-round schools and extended calendar school programs. Secondly, the study shall identify the

variables leading to the development of year-round schools. These variables may be state, student, school, or community driven. Lastly, the study must determine the effects of year-round education reform upon students, schools, and communities. Effects should include, but are not limited to: student achievement, student behavior, student morale, student attendance, faculty attendance, faculty morale, child-care, summer programs, and family vacations. From these aforementioned YRE effects, theoretical effects can be extrapolated regarding the potential impact of YRE on agricultural education programs and their communities.

1.4 Limitations

The study was conducted with the intent of determining the potential effects of YRE upon agricultural education programs. Since a YRE agricultural education program could not be identified within the area accessible to the researcher, the recommendations of this study are speculative.

The study utilized a technique called meta-analysis. Meta-analysis, which includes the re-analysis of research conducted by a variety of sources, creates numerous limitations. The consistency in which the studies were conducted varies from study to study. Two of the studies were based on data collected by school districts with regard to the particular YRE program conducting the research. The last two studies were based on data collected from research conducted by school districts interested in introducing a YRE program within the district. Each school district used their own survey method of collecting the research as well as different methods of data analysis. For example,

although three out of the four school districts claimed that YRE increased student achievement, no school indicated the degree to which YRE made that increase.

In addition, the method of sampling used by the researcher has limitations. The researcher selected Ohio programs to be included in the study. Ohio has only five school districts in the entire state with existing YRE programs. From these five districts, two showed interest in participating in the study. The researcher also arbitrarily selected two schools within an area accessible to the researcher that had extensively researched YRE programs.

1.5 Significance of the Problem

Little research has been conducted on YRE, and much of the existing research exhibits conflicting results. The results of this particular study on YRE can be added to this existing research to offer support or opposition to previous overall YRE research. Little research, however, has been conducted on the effects of YRE upon vocational education programs. Agricultural education is one type of vocational program that can be found in schools across the United States.

Agricultural education consists of three components: classroom instruction; FFA participation; and individual supervised agricultural experience (SAE) projects/programs. These components work together to teach students about agriculture as the information students learn in the classroom is reinforced by hands-on learning opportunities through FFA activities and individual SAE projects and vice versa. This system makes agricultural education programs unique from any other vocational or college preparatory course offered in most secondary schools.

The uniqueness of such a program, however, brings to question the effect of YRE on this three-component system. Since summer vacation has traditionally been a busy time for agricultural education students, the scheduling alterations of YRE could lead to decreased participation in FFA activities and fewer opportunities to develop SAE programs. These same scheduling changes, however, lead to a more consistent teaching/learning pattern without long breaks, and therefore, could lead to increased student achievement among agricultural education students in both the classroom and in the FFA. Decreased participation could virtually destroy agricultural education programs, whereas increased achievement would most likely lead to the growth of many more programs. This study identifies the potential effects of YRE upon agricultural education programs, thus giving educators the opportunity to begin planning and taking proactive measures to ensure the effects of YRE have only a positive impact upon the future of agricultural education.

CHAPTER 2

LITERATURE REVIEW

2.1 Research Related to Objective 1

The exact origin of YRE has not been determined, but critics have argued over giving the rights to three different YRE institutions existing during the 1800s and 1900s. Most researchers have given credit to a school in Bluffton, Indiana, in which William Wirt instituted an all year school program for increasing school capacity and improving learning in 1904. Others, however, argued that YRE began to emerge during the 1870s, with the beginnings of Vacation (Summer) Schools. Still others cited the United States urban schools of the 1840s as the source of YRE. United States urban schools operated 240-250 days throughout the entire year, but few students attended school the entire year. In any case, contrary to popular belief, the concept of YRE has not recently entered the scene, but has been around for quite some time (Glines, 1995).

According to the National Association for Year-Round Education (NAYRE), YRE involved "...reorganizing the school year to provide more continuous learning by dividing the long summer vacation into shorter, more frequent breaks" (NAYRE, Online). YRE did not completely eliminate the traditional summer vacation as students

still received a shortened break during the summer. Students enrolled in YRE received the same amount of instruction, typically 180 days, and attended similar classes as students enrolled in traditional schools. YRE did not indicate an extension of the school year beyond 180 days, although some YRE schools have adopted an extended calendar of up to 240 days of instruction (NAYRE, Online).

YRE programs have been categorized by tracks. Tracks referred to the sequence of days in which students and teachers attended school and were on vacation. Single-track YRE indicated that all students and teachers in the school attended classes and had vacation at the same time. The purpose of the single-track option was to provide a more continuous period of learning for students. Two-track systems divided the school into morning and afternoon sessions in which half of the teachers and student body attended class in the morning and the second half attended school in the evening. The two-track plan has been utilized to increase the capacity of overcrowded schools. Multi-track or multiple-track programs divided the student body into three, four, or five tracks. The instructional and vacation periods of each track were staggered so that a minimum of one track was on vacation at all times. Like the two-track system, multi-track YRE has been implemented to reduce overcrowding and has been successful in increasing building capacity from 25 to 50 percent (NAYRE, Online).

YRE tracks have been further characterized by calendars or the method in which the days of instruction and vacation days have been divided. The most popular calendar has been the 45-15 calendar that includes dividing the year into four, nine-week terms and separating the terms by four, three-week vacations or intersessions. Within this program, four additional weeks each year are allotted for winter holidays, spring

vacation, and national/state holidays. Other calendars include 60-20 plan (three, 60-day terms and three, 20-day vacations); 60-15 plan (three, 60-day terms and three, 15-day vacations as well as three to four weeks of summer vacation); 90-30 plan (two 90-day semesters separated by two 30-day vacations); Quarter Plan (four, 12-week periods of which students are required to attend three); and Quinmester Plan (five terms of which students are required to attend four).

Several calendar options were listed in addition to those previously discussed as well as numerous variations to each of the calendars were described. Most calendars provide track flexibility and have been successfully implemented in both single-track and multi-track YRE programs (NAYRE, Online).

2.2 Research Related to Objective 2

In its beginnings in Bluffton, Indiana in 1904, YRE was implemented as a method of saving space and improving student learning as the continuous learning philosophy was a popular philosophy among educators of the time period. Today, YRE has still been viewed as a solution to space limitations, but the focus behind implementing YRE has broadened and now YRE is sought for the total package (Fogarty, 1996).

Today communities have realized that in using school buildings for only nine of the twelve months out of the year, they are not utilizing the buildings to their fullest potential. Schools have also experienced tremendous growth in their populations, and districts have been exceeding their building capacities. At the same time, building funds on local, state, and national levels have been severely limited. As a result, more and

more schools have been turning to YRE as a solution to managing more students without new facilities (Fogarty, 1996).

In addition to solving space limitations, districts have turned to YRE for the benefits of continuous learning that include improving student achievement and less learning loss. YRE has also been sought for its flexibility in expanding community options, increasing the number of lifestyle choices for families, and increasing the number of personal choices in education. Furthermore, YRE has been looked to for the employment realities it instills in youth (Fogarty, 1996).

2.3 Research Related to Objective 3

Numerous studies have been conducted concerning the effects and impact of YRE on a variety of areas. Researchers have studied the effects of YRE upon staff, administration, student achievement, parents, communities, costs, student learning loss, and extra-curricular activities. Disputes over whether the effects of YRE are positive or negative exist in all areas of research.

In the area of student achievement, studies conducted by Guthrie (1985), Brekke (1986), Moss (1989), and Bradford (1992) all revealed that year-round education enhanced student achievement. A study conducted by Winters (1995) supported these results. Winters reviewed 19 studies regarding the effects of YRE upon student achievement, and from his study, concluded that students participating in year-round education performed better on tests than did their counterparts in a traditional calendar setting (Winters, 1995). Other researchers, however, including Johnson (1984), Kuner-

Roth (1985), Alkin (1987), and Costa (1987) found no significant impact of YRE on student achievement (Kneese, 1996).

In addition to affecting student achievement, YRE has been found to impact the students, school, and communities in a variety of ways. According to Glines (1995), YRE also created employment realities for parents and students. Since many parents work full-time at occupations that do not enable them to spend summer vacation with their children, YRE provided them with non-summer periods to create time with their children. Glines also reported that YRE enabled families more flexibility in planning family vacations.

YRE has been shown to enhance communities by modifying traditional summer activities and making them available to YRE students. Furthermore, YRE has increased the number of opportunities for students to participate in both remediation and enrichment programs due to the presence of intersessions (Glines, 1995).

According to an analysis of YRE by Mutchler (1993), YRE provided numerous advantages including more efficient use of school facilities, a more diversified and enriched curriculum, improved student and teacher attendance, fewer discipline problems, less vandalism, greater learning retention, increased opportunities for enrichment and intervention, and decreased dropout rates. Mutchler also cited several disadvantages of YRE including increased scheduling difficulty of courses, increased scheduling difficulties for families of students attending different schools, increased parent objections, greater expenses due to start-up costs, and increased challenges in unifying staff (Fogarty, 1996).

An analysis of YRE by Inger (1994) revealed similar results. With regard to the school, YRE increased the capacity of existing school facilities, decreased construction costs, increased transition costs, and resulted in an overall decreased per-pupil cost of education. To students, YRE resulted in less learning loss and less need for review at the beginning of the school year, particularly among disadvantaged students. YRE also resulted in lower dropout rates, improved test scores, and less boredom. For parents, YRE resulted in concerns over securing childcare and in managing children on different schedules when one child was enrolled in YRE and one child was enrolled in a traditional program. Furthermore, Inger found that YRE affected teachers by reducing burnout and by reducing the opportunities they have to pursue their own education and pay increases (Fogarty, 1996).

CHAPTER 3

METHODOLOGY

3.1 Research Design

This study incorporated meta-analysis, a research design referring to the analysis of several individual studies and their corresponding results. Studies were evaluated and the results of each study analyzed regarding the three objectives identified in Chapter 1. Meta-analysis enabled the researcher to identify common findings among the studies. Common results from among the studies provided a foundation from which conclusions could be extrapolated regarding the current study's purpose: to assess the impact of year-round education reform upon agricultural education programs and their communities.

3.2 Population and Sample

The Ohio Department of Education identified five Ohio school districts that have implemented a Year Round Education (YRE) calendar in one or more of the district's schools in Ohio. These five school districts included Cincinnati City Schools, Dayton City Schools, Trotwood-Madison City Schools, West Carrollton City Schools, and Xenia Community City School District, and thus became the population of the study. Each of

the school districts was contacted by phone in order to identify a YRE expert within each district. All experts identified by school personnel were district superintendents or principals of a particular YRE school within a district. In addition to contact names, addresses and telephone numbers of the experts were gathered. Attempts were made to collect the email addresses of the experts, however, no expert identified email as a desired method of communication.

3.3 Data Collection

Once the experts were identified, a letter (Appendix A) was drafted explaining the purpose of the study and asking for information regarding the school's YRE program. Specifically, the letter requested a description of the current program, implementation procedures/strategies including survey models and instruments, research studies and findings conducted by or for the school since YRE implementation, and sources of additional information. The information request letters were mailed on December 7, 1999. By the beginning of January, no school had responded to the request.

Phone calls were made to each school expert inquiring if he/she had received the request letter and to ask whether he/she had any questions regarding the desired information. During each phone call, the importance of the particular expert's opinion was emphasized. Due to the variability and eventfulness of experts' daily schedules, numerous phone calls to each school were made in order to contact the experts. In addition, two schools did not end Christmas Break until January 10, 1999, and thus caused additional delays. After two attempted phone calls, messages were left with secretaries and assistants.

The Superintendent of Trotwood-Madison City Schools was the first to respond to the request by sending a packet of information. Four schools, however, had failed to respond to the request, and therefore a second wave of phone calls ensued. Once again, experts' hectic schedules made them nearly inaccessible. Many phone calls went unanswered and messages unreturned. However, this wave of phone calls produced information from McKinley Elementary, a Xenia Community City School District. The information from McKinley Elementary was the last information received from Ohio YRE schools.

After reviewing the collected information, one school from the group of schools that complied with the initial request, Trotwood-Madison City Schools, and one school from the group of schools that failed to comply with the first request, Dayton City Schools, were contacted by telephone to establish a time for the researcher to visit. During the phone calls, the reasoning and details of the visits were explained to the expert. The experts were also informed that the visits could potentially last all day, and that throughout the day, the researcher desired to meet with four separate focus groups, one of which would consist of administration, another of teachers, another of parents, and an additional focus group of students. The groups would be questioned regarding individuals' initial attitudes towards YRE as well as individuals' current opinion of the particular YRE program within the district. Several attempts were made to contact and establish meetings with the schools. Although many calls were made, no definite meeting times were determined for the following reasons.

The expert from Trotwood-Madison City Schools expressed deep concern regarding a visit, stating that “problems” existed in the community. The visit to Trotwood-Madison was pursued no further.

Since Dayton City Schools had 10 YRE schools, the expert directed the visit request to the principal of Patterson Vocational School. Several unsuccessful phone call attempts were made to contact the principal as well as the initial expert on a variety of occasions. No contact was ever made, and all messages were not returned. The visit to Dayton City Schools YRE program was not conducted.

Working with the Ohio Department of Education Agricultural Education staff, a vocational school was found to exist within the Dayton City Schools District that included an agriscience program. Attempts were made by telephone to establish a visit to the program. After numerous calls, the school informed the researcher that the agriscience teacher was no longer employed by the school, and that the agriscience program had been closed. A visit to the school was not pursued.

A professor from the Ohio State University College of Education, identified two Columbus-area school districts, Gahanna-Jefferson City School District and the Worthington City School District, that had extensively researched the prospect of implementing a YRE calendar in a “pilot” school within their prospective districts. Phone calls were made to identify a YRE expert within each district. Once an expert had been identified, he/she was contacted by phone and meetings were established with both programs.

The first visit was made with a principal of a Worthington City School -- Colonial Hills Elementary School. The principal led the district’s research committee on YRE.

He shared research findings gathered by Worthington City Schools, Ohio YRE schools, and YRE schools throughout the United States.

The second and final visit was conducted at the district office of the Gahanna-Jefferson City School. The expert who had conducted most of the research had accepted a position and moved to another school district. However, all of the information the expert had collected from the district's research on YRE remained with Gahanna-Jefferson City Schools and was easily accessible. In total, data was collected from four schools: two school districts with existing YRE programs and two school districts that had extensively researched implementing YRE reform within their respective districts.

3.4 Data Analysis

Written reports regarding the extent of the research conducted and the corresponding findings from each of the school districts was read. The format and content of each report varied as the districts revealed their results in lists, charts, tables, and/or paragraph form. As a result of the varied formats, the researcher deciphered and/or interpreted the data according to the three specific objectives. This resulted in five data categories: description of YRE, variables leading to the development of YRE, YRE effects on students, YRE effects on schools, and YRE effects on communities.

The data were then organized into five separate tables for plotting the results. Some grouping and combining of similar results was conducted at this stage in the analysis and were made at the researcher's discretion. The flow charts summarized the effects of YRE identified by each school and indicated the frequency of which each effect was found. These flow charts have been included in this report as Appendices B, C, D,

E, and F. Any effect that was identified by 50 percent or more of the districts was deemed significant and was reported.

Those effects indicated by a minimum of two of the four schools were used to project potential effects of YRE upon agricultural education programs. Projections were made by the researcher and were based on the relation of the identified effects of YRE to the current characteristics of agricultural education programs. Tables were drawn to illustrate the effects of YRE and their probable corresponding effects upon agricultural education. These tables have been included in the report as Appendices G, H, and I.

CHAPTER 4

RESULTS

Information gathered from each of the four identified schools was analyzed in terms of the study's three specific objectives.

4.1 Objective 1: To describe year-round schools.

School District I

The School District I YRE plan had been implemented in an elementary school in grades kindergarten through sixth. Approximately 400 students were enrolled in the school. This number remained relatively constant as new students were only admitted during the first quarter of the school year. The program consisted of four, integrated nine-week blocks of curriculum. Specifically, the calendar included blocks of 45 days in class and 15 days vacation. During the vacation periods, the school had established intersession programs that include eight to ten days of vacation.

Throughout the intersession periods, students had the opportunity to attend intervention sessions for remediation or tutoring (i.e., summer school) as well as challenging enrichment programs developed for high achieving students. At the midpoint of each quarter, conferences were held giving parents the chance to discuss their

child's/children's academic progress with teachers. Also at this time, students who need to attend intersession courses were identified.

The school district focused entirely upon the existing program in the elementary school. The researchers did not include multi-track programs in its research, nor did they address the distinction between YRE and extended calendar programs.

School District II

School District II administration implemented a YRE calendar in July 1995. The school had a single-track, 45-15 YRE calendar. This calendar included four grading periods, consisting of 45 days or nine weeks of school, broken up by four vacations of 15 days each. During the vacation times, the staff of School II offered students extra learning opportunities through intersessions. These intersessions offer both enrichment programs for gifted students and remediation/intervention programs to assist those students struggling to keep pace. The intersessions often enabled students, who have fallen behind, to catch-up to the rest of the class prior to the beginning of the next session.

The school district's research focused solely upon the existing program in the elementary school. The district did not include multi-track programs in its research, nor did it address the distinction between YRE and extended calendar programs.

School District III

School District III extensively researched the idea of implementing a YRE program within the district. The district's Committee to Study Year Round Education

defined two main types of YRE – single or multi-track programs. Single-track YRE involved spreading the traditional 180-day school calendar over the entire year. No additional instructional days were added to the school calendar. Multi-track YRE was similar in that the 180-day school calendar encompassed the entire year. The main difference between the two forms were in scheduling. Multi-track YRE programs started portions of the student body at different times on different schedules. One of these groups of students or “tracks” was always on vacation. In this way, multi-track YRE programs increased the capacity of school facilities. The committee’s report focused upon multi-track YRE.

The committee also indicated that a variety of calendar structures had been implemented in single and multi-track programs. The district attempted not to focus upon any single structure; however, the 45-15 model was often used as a common example. The 45-15 model includes four, 45-day or traditional nine-week grading periods of school with 15 days vacation between each grading period. Research was conducted with regard to students enrolled in elementary school, middle school, and high school.

School District IV

The Flexible School Calendar Feasibility Committee researched the potential impact of YRE if implemented within School District IV. The district referred to YRE as a “flexible school calendar.” The committee explored both single and multi-track options and looked at the effects of YRE upon students enrolled in elementary, middle, and high school grade levels. The committee did not look at the effects of lengthening

the traditional school calendar, but focused its research upon spreading the 180-day calendar over the entire year.

The district also researched several calendar models including 60-20 (three, 60-day periods of instruction with three, 20-day vacations) and 60-15 (three, 60-day grading periods, with three, 15-day vacations), but chose to focus upon the 45-15 (four, 45-day periods of instruction with four, 15-day vacations) calendar as it supported the schools existing nine week grading schedule and had the greatest overlap with the vacations of the school's existing, traditional calendar. The committee cited that during the 15-day breaks or intersessions, enrichment and remediation programs could be offered to students.

4.2 Objective 2: To identify the variables leading to the development of year-round schools.

School District I

School District I reported that its motive behind the movement to YRE dealt with student achievement. The school district had been experiencing district-wide low test scores, and many of its students appeared inadequately prepared for standardized tests, specifically the Ohio Ninth Grade Proficiency Test. To address the problem, the school district implemented YRE in the elementary schools with the goal of strengthening the elementary academic programs, thus better preparing its students for high school and beyond. The district supported their goals with research stating that a three-month break in the educational experience lead to a significant loss in the knowledge retained by

students. Recognizing the potential knowledge loss, teachers spent a great portion of the new school year reviewing old information in place of teaching new information.

School District II

School District II reported five main reasons for implementing YRE. The school hoped to improve student achievement, boost student and staff attendance, enhance parent and community involvement, develop appropriate behavior among the students, and augment staff development. Since the school was interested in making the preceding improvements, the district's research evaluated the school's success with regards to each reason for YRE reform.

School District III

School District III does not currently have a YRE program in place, but has extensively researched the option due to overcrowding and space limitations. The district was drawn to studies conducted by numerous school districts providing evidence that multi-track YRE programs created a 25 percent gain in building capacity.

The district conceded that YRE would have an impact upon education; however, the main purpose of the study was to look at the effects of YRE upon the capacity of facilities. The educational value of YRE was not heavily considered.

School District IV

School District IV does not have an existing YRE program, but researched the option for numerous aspects including: improving student achievement/retention,

reducing costs, eliminating overcrowding, and responding to parent needs. From its research, the committee concluded that the motive behind a district's move to YRE affected the community's level of receptiveness to the reform. Specifically, parents and community members were more receptive to YRE implementation when the school cited improving student achievement as the motivation for reform rather than addressing building size and financial needs.

4.3 Objective 3A: To determine the effects of year-round education reform upon students.

School District I

School District I identified the following effects of YRE upon students. The district found that after students had been enrolled in YRE, they were better prepared for both achievement and competency tests. In addition, the students displayed higher academic achievement skills and success as well as were more likely to retain information learned in the classroom than students in a traditional school program with a long summer vacation. Students also appeared to exhibit more positive feelings toward their education and the school. The district also discovered that students were more adequately prepared for the future. Although most of the district's findings were positive effects, the district conceded that YRE prevented students from enrolling in community summer camp and enrichment programs since school was in session during many of the traditional camping times.

School District II

School District II found that YRE resulted in only positive effects upon students. YRE increased the retention of previous learning or in other words, resulted in less learning loss. With less learning loss, YRE reduced the need for extensive review sessions in the beginning of each school year. The district also found that YRE caused an increase in student attendance and improved student learning. Furthermore, YRE increased the success of remedial work performed by students and increased participation in the enrichment program. Both of these effects were attributed to the implementation of intersessions during the vacation times from school. In addition, the school system concluded that YRE improved student attitude towards school and initiated an overall reduction in discipline problems. In relation, YRE was also seen to renew student energies for learning and school, thus resulting in less boredom and boosted levels of enthusiasm among students.

School District III

After extensive research of numerous programs, School District III reported that YRE increased student achievement and reduced the amount of boredom students experienced at and from school. The district attributed the boredom reduction was to the placement of the vacations in YRE. With vacations spread throughout the year, students have fewer chances of developing negative feelings toward school.

School District III, however, reported several potentially negative effects of YRE. The district cited that multi-track YRE caused increased concern regarding the scheduling of friends, classmates, and siblings during the same tracks. Their concerns

included parents' desires to have siblings scheduled to attend school at the same time, and students' desires to attend school with their closest classmates and friends. As a result of the split that occurred due to multi-track YRE scheduling, school spirit and moral decreased and students lacked unity and cohesion since students were on different schedules.

School District III also indicated that YRE created increased concern regarding the transportation of students to after-school activities, especially for students who were on vacation and their parents were working. The district found that YRE decreased opportunities for students to participate in traditional summer activities including camps, Bible schools, and athletic teams as well and decreased or in some cases, completely eliminated the opportunity for summer employment.

Furthermore, the district revealed that YRE created increased scheduling concerns. Concerns regarding the scheduling of once-a-year courses increased, especially in multi-track programs. The district also reported increased difficulty in coordinating multi-track programs with vocational school programs due to the varying schedules of each school. Issues regarding the scheduling and participation in extra-curricular activities surfaced as well, particularly among students who were not attending school during a specific extra-curricular activity, but wanted to participate. Finally, concerns mounted regarding scholarship application procedures. Students on later tracks were concerned that they would be penalized in scholarship competitions for completing their graduation requirements at a later date than those students graduating from earlier tracks.

School District IV

School District IV found that YRE had the following effects on students. At the high school level, YRE created increased difficulty in scheduling courses for students, particularly in multi-track programs. However, on the positive side, the district indicated that YRE increased the number of opportunities to provide early remediation and intervention for students as well as increased the opportunities to provide enrichment opportunities for students through the three-week intersession periods. The district also cited that YRE caused an initial decrease in the number of opportunities for students to participate in traditional summer activities such as Bible schools, camps, and sports leagues. The school system continued, however, that if demand was great enough, coordinators were willing to modify the time frames of such programs to accommodate YRE students.

4.4 Objective 3B: To determine the effects of year-round education reform upon schools.

School District I

School District I discovered that YRE reform impacted a school in a number of ways. Since YRE students attended school at different times than students enrolled in the district's traditional schools, a separate bus schedule was necessary in order to provide transportation for all of the YRE students. YRE created the need for additional clerical support in order to supervise the communication with and education of the public in regards to YRE. Since YRE calendars eliminated a long summer vacation, changes had

to be made to the custodial and maintenance plan in order to continue to provide these services. In addition, changes had to be made to the food service provided at YRE schools to ensure quality food service all year-round. Furthermore, special services such as art, music, physical education, and existing intervention programs, had to be rescheduled and modified to meet the needs of YRE students. Although all of these modifications had to be made to the school, the district indicated that the cost of the YRE program was approximately the same as a traditional program.

School District I also revealed that YRE impacted teachers. Additional in-services were needed for teachers to help them adapt to a YRE calendar and develop a YRE curriculum. After YRE implementation, the school reported that teachers and staff experienced less burnout compared to those teachers in a traditional program. The school attributed the decreased burnout to the short vacations that enabled teachers to feel “refreshed” at the start of each new 45-day session.

School District II

School District II focused its research mostly upon the effects of YRE on the teachers. They indicated that YRE intersessions increased student and teacher contact time, which then led to improved teaching and improved student learning. The school also found that YRE renewed staff energies for teaching, resulted in less burnout, and increased teacher’s enthusiasm for their work. Initially, however, YRE also created conflicts among staff members, specifically between those in favor of YRE and those opposed to the change.

As a whole, School District II found that YRE increased overall costs due to personnel costs for intersessions. The data also revealed that after YRE implementation, school vandalism and discipline problems decreased.

School District III

School District III found that YRE had the following effects upon schools. In a multi-track system, YRE increased the building capacity between 25 to 33 percent. Although building capacity increased, however, wear and tear to buildings increased as well. Costs increased due to the need for air conditioning in the classrooms during the summer months, however, the need and the cost of new buildings decreased in the respective district. The school district discovered that YRE created the need for increased secretarial, administrative, and custodial staff as well as more nurses and counselors. In addition, YRE increased the responsibility for principals of multi-track YRE programs. Modifications were needed in scheduling facility cleaning and maintenance since YRE eliminated the largest school cleaning opportunity – summer vacation. Overall, school spirit remained approximately the same.

From the perspective of the staff, YRE without adequate in-service training and regular planning sessions reduced the effectiveness of teachers in YRE. Scheduling in-services around track changes has been shown to eliminate this problem. YRE also creates a lack of time for faculty to pursue advanced degrees and/or continuing education programs. The district revealed that turnover rates for teachers in multi-track YRE programs were low and recruitment rates for teachers in multi-track YRE programs were high and often included waitlists. Furthermore, the system found that some teachers

experienced burnout with extended contracts within two years, while others found YRE more professional and flexible by allowing them to choose to teach intersessions, have extended contracts, or enjoy their vacations. YRE led to fewer opportunities for the entire staff to work together and created a lack of staff unity, communication, and staff involvement, especially among those opposed to YRE. Finally, changing classrooms in YRE was often complex for some teachers.

School District IV

School District IV reported the following effects of YRE upon schools. Since the resulting costs of YRE implementation were highly controversial, School District IV attempted to clarify the issue. The district found that utility costs did not increase with a single-track year-round calendar. Although air conditioning needs and costs increased in August, the added cost was offset by decreased heating needs in the winter and spring due to extended winter and spring breaks. The school also cited that food service costs of YRE schools increased when YRE was not implemented district-wide, specifically when YRE schools did not have a full service kitchen. Furthermore, transportation costs of YRE schools increased when YRE was not implemented district-wide, specifically when students enrolled in YRE schools had to be bused from locations throughout the entire district. Busing concerns often occurred when parents on a district-wide basis were given the option of enrolling their students in the YRE program. Although intersessions were offered, personnel costs did not increase.

In addition to the effects of YRE upon school costs, the district also found that the number of opportunities available for teachers to take classes in the summer decreased.

If, however, teachers created sufficient demand for such services, universities and colleges would be justified in modifying programs and classes to coincide with intersessions.

4.5 Objective 3C: To determine the effects of year-round education reform upon communities.

School District I

School District I indicated that parents were the largest group of community members to be affected by YRE, and thus focused upon the effects of YRE upon parents. The school system reported that parents displayed a more positive attitude toward the program after YRE had been implemented. The changes involved in YRE facilitated an increased amount of communication between the school and parents. Some parents in the district experienced difficulties in scheduling life around children in different schools on different schedules. For example, parents with one child enrolled in the elementary YRE program while the second child attended a traditional high school, experienced problems in organizing their daily lives.

With four 15-day vacations, however, YRE resulted in more flexibility for parents to plan family vacations compared to a traditional program with only one summer vacation. The lack of a summer vacation also led to decreased opportunities for parents to enroll their children in summer camps and enrichment programs since YRE could be in session during the traditional camp times. Finally, the research of School District I

indicated that parents initially experienced difficulty in securing childcare during the non-traditional break times.

School District II

School District II also reported the effects of YRE upon families. Like School District I, District II indicated increased school, parent, and community partnerships as a result of YRE. The school system found that the four different breaks from school gave families the opportunity to enjoy a wider variety of vacation experiences throughout the year. The same changes in the schedule that led to increased flexibility in vacationing, however, also caused families to struggle with transportation issues, experience difficulty in securing childcare, and to grapple with the challenges presented by children on different school schedules (i.e., one child enrolled in YRE and one child enrolled in a traditional program).

School District III

School District III found the following effects of YRE upon communities. Multi-track YRE schedules increased the need for the development of new enrichment and summer camp programs for students as YRE decreased the opportunities available for YRE students to enroll in traditional summer programs. With some children enrolled in YRE while others remained in traditional programs, more room became available in city pools. Since YRE led to the use of buildings year-round, schools were available for use by the public summer evenings. In relation, multi-track YRE enabled more classrooms to be available to be used by a larger number of students.

YRE, however, caused increased difficulty in scheduling weekly Vacation Bible Schools, but on a positive side led to a more consistent church attendance without the usually summer lag experienced by churches in traditional school communities. In addition, the district indicated that YRE led to increased difficulty in securing childcare during the non-traditional vacation times as well as greater difficulty in scheduling day-care staff due to the constant fluctuation in the number of students participating.

School District IV

School District IV made the following conclusions regarding the effects of YRE upon communities. The district reported that the flexible school calendar option changed the time of year childcare was needed. Upon initial implementation, YRE led to increased difficulties in securing childcare, but once a demand for childcare was created, childcare providers adjusted to the public's needs. YRE also decreased student participation in traditional summer activities (i.e., Bible schools, camps, and sports leagues) due to scheduling conflicts between school and these events. Furthermore, the school indicated that YRE led to increased stress on parents and families with children on varying schedules. An example of such a varying schedule included one child enrolled in YRE in the elementary school, with the other children in the middle and high schools that did not have the option of enrolling in YRE. Other examples dealt with siblings attending school on different tracks within a multi-track program.

CHAPTER 5

DISCUSSION

5.1 Conclusions

Although each of the data sets gathered by the four school districts exhibited variations, the following conclusions regarding Objectives 1, 2, 3A, 3B, and 3C can be made.

Objective 1

The data yielded the following conclusions concerning the description of YRE (Appendix B). All four school districts drew a distinction between YRE programs and extended calendar programs or those schools that had increased the actual number of days that students attended school. Each school district indicated that YRE involved spreading the traditional 180-day school calendar over the entire year. YRE schools may choose to add extra days onto the traditional calendar, creating a combination extended calendar and year-round education program. Furthermore, schools with extended calendars were not necessarily YRE. Therefore, increasing the number of days in the traditional calendar (i.e., over 180 days) was not a defining characteristic of YRE.

The two school districts with existing YRE programs were both examples of single-track YRE. Single-track indicated that all students enrolled in the school, attended school on the same scheduled dates and times. The two school districts that studied a variety of YRE programs collected their data from a combination of single and multi-track programs. School District III, however, tended to place more emphasis on multi-track programs, or programs in which students attended school on different schedules, thus allowing the school to accommodate a larger number of students. On the other hand, School District IV focused more heavily upon single-track programs. Upon closer examination, there appeared to be a correlation between the type of track selected and the motivation or reasoning behind a school's movement to YRE. Those school districts seeking YRE reform as a solution to overcrowding, tended to select multi-track programs over single-track programs. School districts with other reasons for seeking YRE reform were more likely to select single-track programs.

All four school districts studied the YRE calendar, 45:15, which indicates 45 days in school followed by 15 vacation days. Four of these 45-day grading periods were spaced throughout the year. Although there were numerous alternatives to this calendar, the 45:15 calendar appeared to be one of the most popular. One of the biggest reasons schools adopted the 45:15 calendar lied with the fact that it most closely preserved the traditional nine-week grading system present in many schools today.

Each of the school districts also included intersessions as a part of the YRE program. Intersessions were short school sessions focused on intervention, remediation, as well as enrichment. The intersessions provided early assistance to students who were falling behind in class and often helped students reach the desired level before the

beginning of the next grading period. In this way, intersessions served as the same role as summer school except they offered intervention for students numerous times and eliminated the need for a review of the entire class and materials in its entirety.

The two school districts with existing programs were both elementary programs. The two school districts without programs researched YRE options in elementary, middle, and high schools. YRE has been successfully implemented in all of these age levels, however, elementary programs were the most common throughout Ohio.

Objective 2

The following conclusions can be made concerning the variables leading to the development of YRE (Appendix C). Overall, the school districts identified eight common variables leading to the development of YRE. One hundred percent of all schools cited “To improve student achievement,” as the main motivating force behind a school’s decision to implement YRE reform. In addition, 50 percent of the schools identified, “To reduce overcrowding,” and “To increase parent/community involvement in education,” as other motivating forces behind YRE implementation.

The motivation behind a school district’s decision to shift to YRE correlated with the program design the school selected. Schools, which focused on improving student achievement, like School District IV, were attracted to a single-track YRE system. The schools cited that YRE eliminated the need for lengthy review at the beginning of the school year, provided a steadier and more constant rate of education without long breaks, gave opportunities for immediate intervention, and increased the availability of enrichment program opportunities. Other schools faced with space limitations, like

School District III, focused on multi-track programs as these schedules increased the efficiency of school facility use.

The motivation or variables leading to the development of YRE also impacted the receptiveness of the parents and community to YRE. According to School District IV, parents appeared more receptive to YRE when school districts' presented the reform as a method of improving the education provided to students. Parents were much less receptive and often vigorously opposed to YRE when schools sought the reform as a means of saving the school district money or eliminating overcrowding.

Objective 3A

The following conclusions can be made regarding the effect of YRE on students (Appendix D). Three out of four school districts indicated that YRE improved student achievement with regard to academic performance in the classroom as well as on standardized tests. Seventy-five percent of the schools also revealed that YRE increased students' ability to retain information learned. Schools attributed this fact to the lack of a lengthy summer vacation within YRE. In place of summer vacation, YRE provided several short breaks that allowed adequate time for students to refresh their minds and re-motivate, but did not allow students time to forget the knowledge gained in the classroom. The school districts also cited that since retention rates increased, less time was needed for review at the beginning of each session. This was contrary to the traditional school system in which nearly the entire first month was spent reviewing when students returned from summer break. Since students in YRE attended school on a regular pattern throughout the year, broken by short vacations, there was less need for

time spent reviewing. In relation to less need for review, two of the four school districts also found that YRE improved students' attitudes toward school and decreased the amount of boredom students experienced.

Three of the four school districts indicated that YRE yielded fewer opportunities for students to participate in traditional summer activities including camps, vacation Bible schools, and summer sports leagues. Fewer opportunities were available to YRE students as they were attending school during the time in which these events were traditionally scheduled. A portion of School District IV's research was devoted to the issue of traditional opportunities. The committee contacted numerous summer program sponsors, inquiring as to the possibilities of modifying the dates of such events to coincide with the breaks in the YRE calendar. Several sponsors appeared interested in the idea, but stated that they would only alter their schedules if significant public demand for the service was generated.

Fifty percent of the school districts also found that YRE increased student participation in enrichment programs and increased the success of student remediation programs. Both results have been attributed to the presence of intersessions within a YRE program. In the case of enrichment programs, intersessions not only provided the opportunity for schools to sponsor a greater number of enrichment programs, but also permitted the school to plan unique learning activities with trips since school was not in session. With remediation, increased success was often linked to the timing of the intervention. In a traditional school program, summer school served as the primary opportunity for students to receive classroom assistance. On the contrary, in a 45:15 YRE calendar, intersessions offered intervention programs four times throughout the

year. YRE students receive the help they need in a more timely fashion and can often be brought up to speed prior to the beginning of the next grading period.

The final common effect of YRE dealt with course and program scheduling. Two of the four schools found that when YRE reform was introduced, scheduling problems experienced by students increased. Not only did students encounter scheduling difficulties with courses, but also in working with vocational schools. Although scheduling problems were evident in both single and multi-track programs, the problems were more severe in multi-track YRE. Multi-track YRE scheduling problems also included the challenges of scheduling siblings in the same YRE track. Scheduling problems occurred most often at the high school level. Schools that studied high school programs were the two schools that reported increased scheduling problems for students in YRE.

Objective 3B

YRE had the following effects on schools (Appendix E). Seventy-five percent of the schools indicated that YRE resulted in increased costs to the school. The cost increases varied from increases in transportation costs to increases in the cost of utilities namely due to greater air conditioning needs. Two of the four schools also reported that they observed no overall cost increase. School District IV, which indicated an increase in transportation costs but no overall cost increase, claimed that as some costs rose, others fell or remained steady. For example, air conditioning costs increased while personnel expenses remained constant. As a result of this conflicting data, the effect of YRE upon school expenses appeared to be influenced by the particular school district.

The study indicated, however, that several changes had to be made to the school to accommodate YRE. Two of the four schools revealed that YRE created the need for modifications to the transportation system, clerical support staff, custodial/maintenance plans, food service, and special services including art, music, physical education, and traditional intervention programs. Specifically, transportation needs increased especially when only one or two schools within the district converted to YRE. In this situation, transportation needs grew not only due to the new schedule, but also due to the fact that students from around the district must be transported to the YRE school if they chose to enroll in the program.

To ensure constant communication between the school and parents/community members, YRE increased the need for clerical support. A new custodial/maintenance plan was needed since a long summer break was no longer available for the completion of such services. Food service needs increased as well since the kitchen and its staff must be operational year-round. Furthermore, scheduling changes were needed in all special education programs such as art, music, and physical education.

YRE had a variety of effects upon teachers as well. Fifty percent of the schools revealed that YRE created a need for YRE-related teacher in-services to help teachers adapt personally and professionally to a YRE program. Two out of four schools reported that after a YRE program has been implemented, teachers experienced less burn-out from teaching in a YRE program compared to those teaching in a traditional program. Fifty percent of the schools also indicated that YRE created equity and unity issues among the staff, specifically in situations in which not all teachers favored YRE reform. Finally, 50 percent of the schools also found that YRE created fewer opportunities for teachers to

pursue advanced degrees. The summer vacation of a traditional school year provided the opportunity for teachers to take college classes on a full-time basis. In a YRE system, teachers may not have the opportunity to pursue their education full-time and instead, must do so on a part-time basis while teaching.

Objective 3C

The schools indicated a variety of effects of YRE reform upon communities (Appendix F). Parents were the most common aspect of the community studied by each school district. One hundred percent of the schools indicated that the new schedule of YRE created increased difficulty for parents in securing childcare. Traditionally, childcare facilities increase their capacity during the months of summer vacation in anticipation of an increased number of families in need of childcare. YRE included a completely different schedule and therefore, childcare providers were not prepared to accommodate all of the children at YRE vacation times. As a result, many families found it difficult to secure childcare. Schools reported that over time, childcare facilities could adapt to the new schedule, thus reducing, or even eliminating, any problems experienced by parents.

In relation to securing childcare, 75 percent of the schools reported a decrease in opportunities for parents to enroll youth in summer activities. In many instances, parents looked to summer activities, such as camps and Bible schools, to provide childcare. The decrease in these opportunities thus perpetuated the problems encountered by parents in securing childcare and limited the non-school educational and personal development experiences in which students could participate. If parents created sufficient demand,

however, summer program sponsors indicated a willingness to adjust their programs to accommodate YRE youth.

Three out of the four schools also reported increased stress placed on parents and families with children enrolled in varying tracks or schedules. Siblings can find themselves in different tracks in numerous situations. Often families have children enrolled in different levels of school (i.e., elementary, middle, or high school). In many cases, not all schools within the district are YRE. In fact, many elementary schools were YRE, while the middle and high schools still followed a traditional calendar. As a result, families could have one child enrolled in a YRE elementary school while the other child was enrolled in a traditional high school. In other instances, both siblings could be enrolled in a multi-track YRE program with each sibling enrolled in a different track. Different tracks equaled different schedules. In either instance, varying schedules made family life difficult to manage.

Fifty percent of the schools found that YRE increased parents' flexibility in planning family vacations. In a traditional program, summer vacation provided the only lengthy opportunity for families to vacation without children missing school. A 45:15 YRE calendar includes four different breaks during which families may take vacations. A big exception, however, occurs when a family has children on varying schedules. In this case, YRE decreased a family's flexibility.

Finally, two out of four schools reported increased communication between parents and the school personnel as a result of YRE. The schools did not indicate whether the communication was positive or negative. Instead, schools stressed the fact that parents became more interested/involved in the school.

The purpose of this study was to assess the impact of year-round education (YRE) reform upon agricultural education programs and their communities. From the summary results in Chapter 4, the following effects of YRE reform upon agricultural education programs can be extrapolated. To correspond with Objective 3, the effects upon agricultural education programs have been broken into three sections: students, schools, and communities.

Probable Effects of YRE Upon Students Enrolled in Agricultural Education

From the preceding conclusions regarding the effects of YRE upon students, the following probable effects of YRE upon agricultural education students were extrapolated (Appendix G). Since YRE increased student achievement in courses and on standardized tests, students enrolled in YRE agricultural education programs will show increased achievement in coursework and on competency tests as well. YRE agricultural education students should also show increased learning retention and less need for extensive review after the shorter, YRE breaks. The increase in student achievement and learning retention, however, may be minimal because a traditional agricultural education program can be viewed as a form of YRE. In a traditional program, students not only complete coursework, but also develop a Supervised Agricultural Experience (SAE) project/program.

The SAE project/program extends for at least one year and gives students the opportunity to gain hands-on knowledge and experience related to an agricultural topic/industry of interest. As students work with their SAE, the agricultural education instructor provides support and feedback to the students, even during summer vacation in

a traditional high school. As a result, agricultural education can be seen as YRE and therefore, the implementation of a YRE calendar upon agricultural education students' achievement and retention levels may have little positive effect. In fact, YRE may limit students' participation in SAE projects, thus reducing SAE induced achievement and resulting in no overall increase in achievement due to YRE.

YRE has also been shown to decrease students' opportunities to participate in traditional summer activities including camps, Bible schools, athletic teams/events, and summer employment. As a result, YRE would also lead to fewer opportunities for agricultural education students to participate in summer agricultural education activities including FFA Camp, Washington Leadership Conference, County/State Fairs, local FFA chapter activities, and SAE projects or summer employment. Agricultural education consists of three components: FFA participation, individual SAE programs, and classroom instruction. Without any of these components, a program is not fulfilling its obligation to its students, and students are not reaching a high level of student achievement.

YRE improved students' attitudes toward school and resulted in less boredom, and will potentially do the same for agricultural education students. Since YRE includes intersessions during which remediation and enrichment programs can be offered, YRE will potentially lead to the development of agriculture-related remediation and enrichment programs. These new programs will not only increase the level of student achievement, but could also serve as recruitment tools for new agricultural education students.

The most potentially damaging effect of YRE upon agricultural education programs deals with scheduling. YRE has been shown to increase scheduling difficulties for courses, including vocational programs. Since agricultural education is a vocational elective course, increased scheduling conflicts between electives and required courses, could lead to decreased enrollment in the agricultural education program.

Probable Effects of YRE Upon Schools With Agricultural Education

From the conclusions drawn regarding the effects of YRE upon schools, the following effects of YRE upon agricultural education programs were predicted (Appendix H). YRE led to many budget issues within the school district that appeared to be specific to the particular school district. Increased costs due to utilities, transportation, food service, custodial/maintenance, and clerical support could lead to budget strain within the district. Since agricultural education programs are purely elective, school districts have no obligation to maintain such programs. As a result, agricultural education programs could be subject to budget cuts or complete termination by the district if YRE causes increased expenses.

YRE also has had a significant impact on the teachers. Teachers experienced less burnout, which resulted in a more dedicated and enthusiastic approach to learning. YRE also led to increased need for YRE-related in-services, increased equity/unity issues among staff, and decreased opportunities for teachers to pursue advanced degrees. As a member of the school staff, agricultural education instructors will undoubtedly be affected by YRE in the same manner.

Probable Effects of YRE Upon Communities of Agricultural Education Programs

According to the conclusions concerning the effects of YRE upon communities, the following effects of YRE upon communities with agricultural education programs were speculated (Appendix I). Due to the untraditional vacation times of the YRE school year, parents of students enrolled in YRE have experienced increased difficulty in securing childcare. Since agricultural education programs are most commonly found in high schools, securing childcare for youth during summer vacation does not seem to be problematic. However, high school youth are the appropriate age to serve as childcare providers, especially when parents are hard pressed to find childcare. When youth serve as childcare providers, their opportunities to participate in extra and intracurricular activities including agricultural education skills contests, camps, conferences, and other events, decline. In relation, YRE increased stress on parents and families with children on varying schedules. Transporting children to and from agricultural education activities adds to the stress of these families. As a result, youth of these families may be discouraged from participating in such activities.

In addition, due to the restrictive schedule of YRE, parents' opportunities to enroll youth in summer activities decreased. Furthermore, YRE increased the flexibility of parents planning family vacations. A variety of vacation times, however, can lead to increased difficulty in planning and building attendance at local FFA chapter events. From a variety of aspects, YRE could significantly reduce youth participation in agricultural education activities.

YRE, however, increased communication between parents and the school. Although the agricultural education instructor has numerous opportunities to visit with

parents, more communication between parents and teachers regarding their son's or daughter's education will continue to improve the services provided by the school and the program.

5.2 Recommendations

Based on the probable effects of YRE upon agricultural education students, programs, and communities, agricultural educators must take the initiative to familiarize themselves with YRE terminology and existing types of YRE programs. Educators must also stay up-to-date regarding the latest research on YRE and its effects upon students, schools, and communities in order to predict changes in the potential effects of YRE upon agricultural education. Closely watching trends in YRE will provide agricultural educators with the information needed to take a proactive approach if and when their individual school districts implement YRE.

It is also recommended that agricultural educators start addressing the potentially problematic effects of YRE upon agricultural education programs. For example, YRE could potentially decrease enrollment in agricultural education programs and reduce participation in FFA activities due to the scheduling conflicts of YRE. By beginning to search for solutions to these problems today, agricultural educators will be better prepared to successfully handle these situations if and when they arise.

In conclusion, although many of the potential effects of YRE upon agricultural education could be beneficial to the program, it is recommended that agricultural educators take an overall proactive approach to YRE in order to ensure the successful merger of YRE and agricultural education.

5.3 Future Investigations

Overall, this study reinforced the need for future investigations in regards to the effects of YRE upon all aspects of student achievement, student life, school expenses, school staff, childcare, and family life. In addition, this study merely projected the probable effects of YRE upon agricultural education programs. Extensive research needs to be conducted on actual YRE agricultural education programs to determine the effects of YRE.

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APPENDICES

LIST OF APPENDICES

APPENDIX A: Letter of Request	54
APPENDIX B: Summary of Characteristics of YRE.....	55
APPENDIX C: Summary of Variables Leading to the Development of YRE.....	56
APPENDIX D: Summary of Effects of YRE Upon Students.....	57
APPENDIX E: Summary of Effects of YRE Upon Schools.....	59
APPENDIX F: Summary of Effects of YRE Upon Communities.....	62
APPENDIX G: Summary of Effects of YRE Upon Students and the Probable Corresponding Effects of YRE Upon Agricultural Education Programs.....	64
APPENDIX H: Summary of Effects of YRE Upon Schools and the Probable Corresponding Effects of YRE Upon Agricultural Education Programs.....	66
APPENDIX I: Summary of Effects of YRE Upon Communities and the Probable Corresponding Effects of YRE Upon Agricultural Education Programs.....	68

APPENDIX A: Letter of Request

December 7, 1999

Cresthills Year Round School
1908 Seymour Ave.
Cincinnati, OH 45237

Dear Mr. James Reilly:

I am a senior honors student majoring in Agricultural Education at the Ohio State University. Currently, I am working with an OSU faculty member to complete a senior honors thesis.

As a project focus, my advisor and I have chosen year round education and its potential effects upon Ohio agricultural education programs. Agricultural education programs are elective programs offered in over 300 Ohio high schools or career technical centers and focus specifically upon educating and training youth in agriculture and leadership. Currently, there are five schools in the state of Ohio that have either implemented year round school programs or have extensively researched the option.

As a school that has implemented and/or researched year round programs, you are undoubtedly an expert on this topic. Currently, I am in the beginning stages of survey writing and am seeking any sample surveys, reports, etc. that you may have used during your research. Any assistance you could provide would be greatly appreciated.

All information can be mailed directly to me at the Department of Human and Community Resource Development; Attn.: Kristi Kress; 208 Agricultural Administration Building; 2120 Fyffe Road; Columbus, OH 43210. If you have any questions or concerns, I can be reached by phone at (937) 446-2320 or by email at kress.18@osu.edu. Thank you!

Sincerely,

Kristi S. Kress

Jamie Cano

APPENDIX B: Summary of Characteristics of Year-Round Education

Characteristics/ School District (SD)	Base of Research	Length of Calendar in Program(s) Studied	Track Description of Program(s) Studied	Calendar Description of Program(s) Studied	Use of Intersessions in Program(s) Studied	Age Level(s) of Program(s) Studied
SD 1	Studied program in SD 1	180 days	Single Track	45:15 45 days school 15 days break	Remediation and Enrichment Programs	Elementary School, Grades K-6 th
SD 2	Studied program in SD 2	180 days	Single Track	45:15 45 days school 15 days break	Remediation and Enrichment Programs	Elementary School
SD 3	Studied many programs; no YRE in SD 3	180 days	Single and Multi Track	45:15 45 days school 15 days break	Remediation and Enrichment Programs	Elementary, Middle, and High Schools
SD 4	Studied many programs – no YRE in SD 4	180 days	Single and Multi Track	45:15 45 days school 15 days break; also 60:20 and 60:15	Remediation and Enrichment Programs	Elementary, Middle, and High Schools

APPENDIX C: Summary of Variables Leading to the Development of Year-Round Education

Variables/ School District (SD)	Improve Student Achievement	Increase Student Attendance Rates	Increase Staff Attendance Rates	Increase Parent and Community Involvement	Improve Student Behavior	Increase Staff Development	Reduce Overcrowding and Space Limitations	Decrease Costs
SD 1	❖							
SD 2	❖	❖	❖	❖	❖	❖		
SD 3	❖						❖	
SD 4	❖			❖			❖	❖

APPENDIX D: Summary of Effects of Year-Round Education Reform Upon Students

Effects/School District (SD)	SD 1	SD 2	SD 3	SD 4
Improved Student Achievement	❖	❖	❖	
Increased Learning Retention/Less Need for Review	❖	❖	❖	
Improved Students' Attitudes Toward School/Less Boredom	❖	❖		
Fewer Opportunities to Participate in Traditional Summer Activities (i.e., Camps, Bible Schools, Athletic Events)	❖		❖	❖
Better Prepared for Future Employment	❖			
Higher Attendance Rates		❖		
Decreased Discipline Problems		❖		
Increased Participation in Enrichment Programs		❖		❖

APPENDIX D: Summary of Effects of Year-Round Education Reform Upon Students (Cont.)

Increased Success of Remedial Programs		❖		❖
Increased Scheduling Problems of Courses and Vocational Programs			❖	❖
Decreased Student Moral/Spirit			❖	
Increased Transportation Problems			❖	
Decreased Opportunities for Summer Employment			❖	
Increased Scheduling Conflicts of Extracurricular Activities			❖	

APPENDIX E: Summary of Effects of Year-Round Education Reform Upon Schools

Effects/School District (SD)	SD 1	SD 2	SD 3	SD 4
Increased Transportation Needs to Accommodate Students on YRE Schedule	❖			❖
Increased Need for Clerical Support	❖		❖	
Created Need for Changes to Custodial and Maintenance Service Plans	❖		❖	
Increased Need for YRE-Related Teacher In-services	❖		❖	
Created Need to Change Food Service	❖			❖
Created Need for Changes to Special Services (i.e. Art, Music, Physical Education, Chapter 1, etc.)	❖		❖	
Decreased Burn-out of Teachers and Staff	❖	❖		

APPENDIX E: Summary of Effects of Year-Round Education Reform Upon Schools (Cont.)

No Cost Increase (i.e. Personnel, some utilities)	❖			❖
Increased Student/Teacher Contact		❖		
Reduced Vandalism/Discipline Problems		❖		
Increased Costs (i.e. Transportation, some utilities)		❖	❖	❖
Created Equity/Unity Issues Among Staff		❖	❖	
Increased Building Capacity			❖	
Decreased Opportunities for Teachers to Pursue Advanced Degrees			❖	❖
Decreased Teacher Turnover Rates			❖	

APPENDIX E: Summary of Effects of Year-Round Education Reform Upon Schools (Cont.)

Increased Teacher Recruitment Rates			❖	
Increased Flexibility in Teachers' Lives			❖	
Increased Responsibility of Principals			❖	

APPENDIX F: Summary of Effects of Year-Round Education Reform Upon Communities

Effects/School District (SD)	SD 1	SD 2	SD 3	SD 4
Improved Parents' Attitudes Toward the School	❖			
Increased Communication Between Parents and the School	❖	❖		
Increased Stress on Parents and Families With Children on Varying Tracks/Schedules	❖	❖		❖
Increased Flexibility in Planning Family Vacations	❖	❖		
Decreased Opportunity for Parents to Enroll Children in Summer Activities	❖		❖	❖
Increased Difficulty in Securing Childcare at Non-Traditional Times	❖	❖	❖	❖

APPENDIX F: Summary of Effects of Year-Round Education Reform Upon Communities (Cont.)

Families Experienced Increased Difficulty in Providing Transportation for Students		❖		
Created Need for the Development of New Summer and Break Activities			❖	
Increased Room in City Swimming Pools			❖	
Created Availability of Schools and School Facilities Year-Round			❖	
Improved Church Attendance Without Summer Lag			❖	
Increased Number of Classrooms Available to Be Used by More Students			❖	

**APPENDIX G: Summary of Effects of YRE Upon Students and the
Probable Corresponding Effects of YRE Upon Agricultural Education Programs**

Percent Schools Reporting Effect	Effects of YRE Upon Students	Corresponding Effect of YRE Upon Agricultural Education (Ag Ed) Programs
75%	Improved Student Achievement	Improved Student Achievement in Ag Ed
75%	Increased Learning Retention/Less Need for Review	Increased Learning Retention in Ag Ed
75%	Fewer Opportunities to Participate in Traditional Summer Activities (i.e. Camps, Bible Schools, Athletic Events)	Fewer Opportunities to Participate in FFA Camp, Washington Leadership Conference, Fairs, Summer Employment, and SAE Projects
50%	Improved Students' Attitudes Toward School/ Less Boredom	Improved Student Attitude Toward School/Less Boredom
50%	Increased Participation in Enrichment Programs	Development of Ag-Based Enrichment Programs
50%	Increased Success of Remedial Programs	Increased Success of Remedial Programs in Ag Ed

**APPENDIX G: Summary of Effects of YRE Upon Students and the
Probable Corresponding Effects of YRE Upon Agricultural Education Programs (Cont.)**

Percent Schools Reporting Effect	Effects of YRE Upon Students	Corresponding Effect of YRE Upon Agricultural Education (Ag Ed) Programs
50%	Increased Scheduling Problems of Courses and Vocational Programs	Increased Scheduling Conflicts of Ag Ed = Decreased Enrollment

**APPENDIX H: Summary of Effects of YRE Upon Schools and the
Probable Corresponding Effects of YRE Upon Agricultural Education Programs**

Percent Schools Reporting Effect	Effects of YRE Upon Schools	Corresponding Effect of YRE Upon Agricultural Education Programs
75%	Increased Costs (i.e. Transportation, Some Utilities)	Potential Budget Cuts to Ag Ed Program
50%	No Cost Increase (i.e. Personnel, Some Utilities)	Ag Ed Program Budget Remains Steady
50%	Increased Transportation Needs	Fewer Opportunities for Ag Ed Program to Obtain School Transportation
50%	Increased Need for Clerical Support	Potential Budget Cuts to Ag Ed Program
50%	Created Need to Reschedule Custodial/Maintenance	Potential Budget Cuts to Ag Ed Program
50%	Increased Need for YRE-Related Staff In-Services	Need for YRE-Related Ag Teacher In-services
50%	Created Need for Changes to Food Service	Potential Budget Cuts to Ag Ed Program

**APPENDIX H: Summary of Effects of YRE Upon Schools and the
Probable Corresponding Effects of YRE Upon Agricultural Education Programs (Cont.)**

Percent Schools Reporting Effect	Effects of YRE Upon Schools	Corresponding Effect of YRE Upon Agricultural Education Programs
50%	Created Need for Changes to Special Services (i.e. Art, Music, Physical Education, Chapter 1, etc.)	Created Need for Scheduling Changes to Ag Ed Courses and Program
50%	Decreased Burn-Out of Teachers and Staff	Decreased Burn-Out of Ag Teachers
50%	Created Equity/Unity Issues Among Staff	Unity Issues Between Ag Teacher and Other Teachers
50%	Decreased Opportunities for Teachers to Pursue Advanced Degrees	Decreased Opportunities for Ag Teachers to Pursue Advanced Degrees

**APPENDIX I: Summary of Effects of YRE Upon Communities and the
Probable Corresponding Effects of YRE Upon Agricultural Education Programs**

Percent Schools Reporting Effect	Effects of YRE Upon Communities	Corresponding Effect of YRE Upon Agricultural Education Programs
100%	Increased Difficulty in Securing Childcare at Non-Traditional Times	Increased Dependence on Older Youth to Provide Childcare
75%	Decreased Opportunity for Parents to Enroll Children in Summer Activities	Decreased Opportunities for Parents to Enroll Youth in Summer Ag Ed Programs or Summer Employment
50%	Increased Stress on Parents and Families With Children on Varying Tracks/Schedules	Increased Difficulty in Parents Ability to Juggle Youths' Participation in Ag Ed Contests and Events
50%	Increased Flexibility in Planning Family Vacations	Increased Difficulty in Scheduling Ag Ed Program Outings and Events During Breaks
50%	Increased Communication Between Parents and the School	Increased Communication Between Parents and Ag Teacher